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## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 09/853,668 PARK, SUNG JIN Office Action Summary Examiner Art Unit SRILAKSHMI K. KUMAR 2629 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 01 February 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-68 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-68 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. \_\_ are subject to restriction and/or election requirement. 8) Claim(s) \_\_\_\_ Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner, Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some \* c) ☐ None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date \_

4)	Interview Summary (PTO-41
	Paper No(s)/Mail Date.

5) Notice of Informal Patent Application

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#### DETAILED ACTION

The following office action is in response to the amendment filed on February 1, 2008. Claims 1-68 are pending. Claims 1, 2, 4-7, 13, 14, 19, 21, 30-33, 38, 40, 49, 51, 53, 55, 57, 59 and 61 have been amended. Claims 63-68 are newly added.

1. Claim 19 is objected to because of the following informalities: Applicant has amended claim 19 to delete the limitation of "unit" in the second line of the claim, and delete the limitation of "usage" in the third line of the claim. With respect to the amendments to other claims, examiner believes that the applicant intended to delete the limitation of "unit" from the third line of claim 19 as opposed to "usage". If this is a correct assumption, examiner requests the applicant to appropriately correct this oversight. Appropriate correction is required.

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62 rejected under 35 U.S.C.
   103(a) as being unpatentable over Hetzler (US 5,954,820) in view of Springer (US 5,936,608).

As to claim 1, Hetzler discloses a method for adjusting a brightness of a display screen of a system, the method comprising; determining whether there are user signal inputs into the system (e.g., determining whether keystrokes is inputted or not); switching the system into an idle mode if there are no user signal inputs (backlight 13 is turned off when a user is not viewing the display); determining processor usage indicative of whether certain display related processes

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are running when in the idle mode; and adjusting the brightness of the display screen when in the idle mode based on processor usage (see column 3, lines 2-9 and column 5, lines 13-50 and column 8, lines 8-13). Hetzler does not teach where the brightness is adjusted without turning the display screen off. Springer teaches in col. 3, lines 15-25 and col. 4, lines 10-28 where the brightness is adjusted without turning the display screen off. Specifically, Springer teaches where the display control system has an operating rules module that identifies operating events and adjust brightness without turning off the display screen. It would have been obvious to one of ordinary skill in the art to include the feature of adjusting brightness without turning off the display screen as taught by Springer into the display system of Hetzler as by reducing brightness, power consumption is reduced (Springer, col. 3, lines 41-48) and prevents the user from having to provide an input to power on the display.

As to claim 13, Hetzler discloses a method for reducing electrical power consumed by a processor controlled display screen (column 2, lines 45-65), the method comprising; determining processor activity indicative of whether certain display related processes are running (column 3, lines 2-38); and dimming a brightness of the display screen when the processor activity falls below a minimum threshold (column 3, lines 2-38, Hetzler teaches where the current access frequency is compared to a previously calculated and continuously updated threshold frequency, where depending on the threshold different power saving modes are initiated). Hetzler does not teach where the brightness is dimmed without turning off the display. Springer teaches in col. 3, lines 15-25 and col. 4, lines 10-28 where the brightness is dimmed or reduced without turning the display screen off. Specifically, Springer teaches where the display control system has an operating rules module that identifies operating events and dims brightness

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without turning off the display screen. It would have been obvious to one of ordinary skill in the art to include the feature of dimming brightness without turning off the display screen as taught by Springer into the display system of Hetzler as by reducing brightness, power consumption is reduced (Springer, col. 3, lines 41-48) and prevents the user from having to provide an input to power on the display.

As to claim 14, Hetzler discloses a computer readable medium having stored thereon a sequence of computer executable instructions which, when executed by a processor, cause the processor to perform the steps of monitoring a system to determine whether for a certain display related processes are running (e.g., determining whether keystrokes is inputted or not); see column 8, lines 8-13. Hetzler teaches a step of maintaining the brightness of the display if the certain display related processes are running (backlight is turned on when a user is viewing the display) and reducing the brightness of a display if the certain display related processes are not running (backlight 13 is turned off when a user is not viewing the display); see column 3, lines 2-9 and column 5, lines 13-50 and column 8, lines 8-13. Hetzler does not teach where the brightness is reduced without turning off the display. Springer teaches in col. 3, lines 15-25 and col. 4, lines 10-28 where the brightness is reduced without turning the display screen off. Specifically, Springer teaches where the display control system has an operating rules module that identifies operating events and reduces brightness without turning off the display screen. It would have been obvious to one of ordinary skill in the art to include the feature of reducing brightness without turning off the display screen as taught by Springer into the display system of Hetzler as by reducing brightness, power consumption is reduced (Springer, col. 3, lines 41-48) and prevents the user from having to provide an input to power on the display.

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As to claim 31, this claim differs from claim 13 above only in that claim 31 is apparatus whereas claim 13 is method. Thus, apparatus claim 31 is analyzed as previously discussed with respect to method claim 13 above.

As to claim 32, this claim differs from claim 14 and 33 above only in that claim 32 is apparatus whereas claims 14 and 33 are method. Thus, apparatus claim 32 is analyzed as previously discussed with respect to method claims 14 and 33 above.

As to claim 33, this claim differs from claim 14 only in that claim 33 deletes the limitation computer-readable medium recited in preamble of claim 14. Thus, claim 33 is analyzed as previously discussed with respect to claim 14 above since claim 33 is broader than claim 14.

As to claim 5, Hetzler teaches wherein determining processor usage comprises measuring a processor usage amount (current access frequency, column 3, lines 2-38), and reducing the brightness of the display screen if the processor usage amount is below a threshold value (column 3, lines 2-38, Hetzler teaches where the current access frequency is compared to a previously calculated and continuously updated threshold frequency, where depending on the threshold different power saving modes are initiated).

As to **claim 6**, Hetzler teaches wherein determining the processor usage comprises determining whether the display screen is displaying a movie (column 6, lines 17-64, whether a DVD is running).

As to **claim 7**, Hetzler teaches wherein determining whether the display screen is displaying a movie comprises determining whether a memory device connected to the processor is operating (column 6, lines 17-64, if a DVD is running).

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As to claim 8, Hetzler teaches wherein the memory device comprises a hard disk (column 6, lines 17-64).

As to claim 9, Hetzler teaches wherein the memory device comprises a CD-ROM (column 6, lines 17-64).

As to claim 10, Hetzler teaches wherein the memory device comprises a DVD (column 6, lines 17-64).

As to claim 11, Hetzler teaches wherein the brightness of the display screen is reduced if the display screen is not displaying a movie (column 8, lines 30-64, specifically lines 55-65 for movies).

As to claim 12, wherein the brightness of the display screen is maintained if the display screen is displaying a movie (column 8, lines 30-64, specifically lines 55-65 for movies).

As to claims 15 and 34, Hetzler clearly teaches system being a computer (portable computer 41).

As to claims 16, 35 and 50, Hetzler teaches wherein the display is a liquid crystal display screen (11).

As to claims 17 and 36, Hetzler clearly teaches monitoring for user input signal (i.e. keyboard activity); see column 3, lines 2-9.

As to **claim 19**, Hetzler teaches wherein the monitoring step comprises determining processor usage amount, and comparing said processor usage amount against a reference amount (column 3, lines 2-38).

As to claim 20, Hetzler teaches wherein the reference amount is controllably variable (column 3, lines 12-18, where the threshold frequency is variable).

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As to claims 24 and 43, Hetzler teaches the monitoring step including determining whether a video process related device is in use: see column 6, lines 17-64.

As to claims 25-26, 28 and 44-45, 47, Hetzler teaches the use DVD; see column 6, lines 17-18. It is known in the art that DVD could be either, a readable and writeable memory or a read only memory.

As to claims 27, 46, 55, 59, 61 Hetzler clearly teaches a CD-ROM; see column 6, lines 17-18.

As to claim 29, Hetzler teaches wherein the video process related device comprises a modem (17, column 4, lines 50-55).

As to claim 38, Hetzler teaches wherein monitoring the system for display related processes comprises determining a processor usage amount, and comparing said processor usage amount against a reference amount (column 3, lines 2-38).

As to **claim 39**, Hetzler teaches wherein the reference amount is controllably variable (column 3, lines 12-18, where the threshold frequency is variable).

As to claim 48, Hetzler teaches wherein the video process related device comprises a modem (17, column 4, lines 50-55).

As to claims 51, 53, 55, 57 and 59, Hetzler teaches wherein the display related processes include at least one of playing a CD-ROM; a DVD, a MPEG file, video file or downloading a video file from the internet or downloading an internet broadcast (column 6, lines 17-64).

As to claims 52, 54, 56, 58, 60 and 62, Hetzler teaches wherein the display related processes do not include user inputs via a mouse or keyboard (column 8, lines 8-13).

As to claims 63-68.

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4. Claims 18 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler in view of Springer as applied to claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62, and further in view of Zenda (US 5.386.577).

As to claims 18 and 37, note the discussion of Hetzler above, Hetzler as modified by Springer do not mention the step of determining whether the system is powered by an internal power source. Zenda teaches that" in response to the low battery state, a luminance control signal having a minimum luminance value is supplied to the flat panel display. When the personal computer is driven by the AC adapter, a luminance control signal having a maximum luminance value is supplied to the flat panel display"; see column 6, line 36 through column 7, line 6. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the step detecting the system being powered by an internal source (battery) as taught by Zenda to the power control of Hetzler as modified by Springer so as to avoid the battery operation time being shortened more than necessary (see Zenda, column 3, lines 35-45).

5. Claims 2, 3, 21, 22, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler in view of Springer as applied to Claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62, above and further, in view of McFedries (Windows ® 98 Unleashed, May 12, 1998).

As to claims 2, 21 and 40, Hetzler teaches determining processor usage amount (column 3, lines 2-38). Hetzler as modified by Springer do not teach where the determining information is contained in a registry. McFedries teaches operating system Windows® 98. On page 14, McFedries teaches HKEY\_DYN\_DATA key, and where the registry files are updated when you shut down the operating system, restart the operating system and at regular intervals when

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running the operating system. The determining information for the processor usage is contained in this registry as shown by McFedries on page 14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the processor usage amount determining information is contained in a registry as taught by McFedries into that of Hetzler as modified by Springer, as Hetzler is a computer system which uses an operating system, such as Windows® 98.

As to claims 3, 22 and 41, McFedries teaches wherein the registry comprises HKEY DYN DATA\PerfStats\StatData (Page 14, Fig. 12.10).

Claims 4, 23, 30, 42, 49 and 63-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hetzler in view of Springer as applied to claims 1, 5-17, 19, 20, 24-29, 31-36, 38, 39, 43-48 and 50-62, above, and further in view of Kardach (US 6,018,803).

As to claims 4, 23 and 42, Hetzler as modified by Springer do not teach wherein the monitoring step comprises determining whether a video process related keyword is contained in the currently operating process.

Kardach teach a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process related keyword is contained in the currently operating process (column 7, lines 1-19, where the bus utilization activity circuit determines whether an MPEG is playing) and determining whether a video process related device is in use (col.7, lines 1-19 where it is determined whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer

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system of Hetzler as modified by Springer as once the bus utilization activity circuit detects a keyword determining a movie is currently operating, it prevents the screensaver from activating.

As to claims 30 and 49, Hetzler teaches wherein the monitoring step comprises; determining processor usage amount and comparing said processor usage amount against a reference amount (column 3, lines 12-18, where the threshold frequency is variable). Hetzler as modified by Springer does not teach wherein the monitoring step comprises determining whether a video process related keyword is contained in the currently operating process.

Kardach teach a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process related keyword is contained in the currently operating process (column 7, lines 1-19, where the bus utilization activity circuit determines whether an MPEG is playing) and determining whether a video process related device is in use (col.7, lines 1-19 where it is determined whether an MPEG is playing). It would have been obvious to one of ordinary skill in the art to include the bus utilization activity circuit as taught by Kardach into the computer system of Hetzler as modified by Springer as once the bus utilization activity circuit detects a keyword determining a movie is currently operating, it prevents the screensaver from activating.

As to claims 63-68, Hetzler as modified by Springer fail to teach wherein the display related processes are indicative of a user watching a video or program on the display screen.

Kardach teaches a computer processing system where the processor comprises a bus utilization activity circuit, wherein the bus utilization activity circuit determines whether a video process is running (col. 7, lines 1-19 where the bus utilization activity circuit determines whether an MPEG is plaving). It would have been obvious to one of ordinary skill in the art to include the bus

utilization activity circuit as taught by Kardach into the computer system of Hetzler as modified by Springer as once the bus utilization activity circuit detects a movie is currently operating, it prevents the screensaver from activating.

#### Response to Arguments

 Applicant's arguments with respect to claims 1-68 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SRILAKSHMI K. KUMAR whose telephone number is (571)272-7769. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Lefkowitz can be reached on 571 272 3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 2629

Examiner Art 2629

SKK

April 25, 2008